

# Tinytag Voltage, Current and Count Input Data Logger User Information

Instructions for using Tinytag Talk 2, Plus 2 and View 2 voltage, current and count input data loggers

## WARNINGS

- If this equipment is installed or used in a manner not specified by the manufacturer then the protection provided by the equipment may be impaired.
- This equipment is fitted with a lithium battery. Danger of explosion if the battery is incorrectly fitted. Do not cut open, incinerate, recharge or expose to temperatures in excess of 100°C (212°F).
- The measurement input is connected to the PC socket GND pin. If the connection to the negative (GND) input terminal is NOT at mains earth potential then the input MUST be disconnected BEFORE connecting the PC.
- Any external circuit connected to the logger should not contain a voltage source greater than 30V DC
- This equipment should be used within the temperature range and other environmental conditions specified on its data sheet.

## Required Software

The software required to use a Tinytag data logger, to start it and to view the data it records, is called Tinytag Explorer.

Details on how to use a data logger with Tinytag Explorer can be found in the software's quick start guide (a copy of which is supplied with the software).

Alternatively, a copy of the manual can be downloaded from our web site here:

[www.tinytag.info/manuals](http://www.tinytag.info/manuals)

## Connection Information

All loggers are supplied with an input cable. If a sensor already has a cable fitted, plugs are available separately to make up a connection. Connection details for both can be found below:

### TGP-4703, TGP-4704, TGP-4804 TV-4703, TV-4704, TV-4804

These loggers are supplied with a CAB-3239 Tinytag Voltage/Current Input Lead (1.5m cable length).

A 5-pin plug, ACS-9703, is available separately.

Connection information for both is as follows:

CAB-3239	Pin	Function
Red	A	Do not connect
Green	B	Do not connect
White	C	Sense Line
Black	D	Common/OV
Yellow	E	Signal Input

### TGP-4901

This logger is supplied with a CAB-3246 Tinytag Count Input Lead (1.5m cable length).

A 2-pin plug, ACS-9700, is available separately.

Connection information for both is as follows:

CAB-3246	Pin	Function
Blue	A	Common/OV
Red	B	Signal Input

### TK-4702, TK-4703 & TK-4802

The Tinytag Talk 2 voltage and current loggers are supplied with a CAB-3233 Talk Voltage/Current Input Lead (1.5m cable length).

The connection details for the cable, and a 2.5mm jack plug, are as follows:

CAB-3233	2.5mm Jack Plug	Function
Yellow	Ring	Signal Input
Black	Shank	Ground/OV
White	Tip	Sense Line

### TGP-4810 & TV-4810

These units should only be used with the ACS-0003 current clamp supplied with the logger.

## Electrical Characteristics (General)

The Sense line (if present) is a signal line that changes state when a reading is taken.

The line goes from 0v to +3.3V, for approximately 50ms, whilst a reading is being taken (the line goes back to 0V when the reading cycle is complete).

The line has an impedance of 10kΩ.

**The Sense Line does not need to be connected for the data logger to record correctly.**

When connecting the logger to a PC for offloading data or using the current reading feature in the Tinytag Explorer software, the logger input must not be connected to a mains powered device or a ground loop could be created resulting in erroneous readings/damage to the unit.

### TGP-4901

If a volt-free switch is being used that requires further de-bounce, this can be achieved by connecting a 10nF capacitor across the switch contacts.

## Battery Information

**Battery Type** SAFT LS14250 or Tekcell SBAA02P

Data loggers will operate with other ½AA 3.6V Lithium (Li-SOCl<sub>2</sub>) batteries, but performance cannot be guaranteed.

**Replacement Interval** Every two years (Talk & Plus)  
Annually (View)

Before replacing the battery the data logger must be stopped.

Data stored on the logger will be retained after a battery is replaced.

## Approvals

Gemini Data Loggers (UK) Ltd. operates a Business Management System which conforms to ISO 9001 and ISO 14001.



## Warranty & Disposal

- This product carries a manufacturing defects warranty of 12 months from the date of purchase. Units returned under warranty will be repaired or replaced at the manufacturer's discretion. This warranty does not cover mishandling, modification or battery replacement and is subject to the standard Terms and Conditions of Sale, a copy of which is available on request.

- **The equipment/goods are sold "as is" and with "all faults" (applies in USA). Claims under warranty should be referred to the point of sale.**

- Data loggers, accessories and batteries should be disposed of at organised facilities, where available, in line with local regulations.

- In accordance with the WEEE directive Gemini Data Loggers (UK) Ltd. will take back and dispose of any equipment purchased directly. Equipment not purchased directly should be returned to the point of sale for disposal.



## Further Information

For further information on these data loggers, including product data sheets, please visit our web site at:

[www.tinytag.info](http://www.tinytag.info)